

What is claimed is:

1. A liquid crystal display panel, comprising:

a first substrate;

a second substrate;

5 a liquid crystal layer sandwiched between the first substrate and the second substrate;

a plurality of first protrusions disposed on the first substrate and separated from the second substrate by a first distance; and

10 a plurality of second protrusions disposed on the first substrate and separated from the second substrate by a second distance different from the first distance, wherein the difference between the second distance and the first distance is smaller than about 2.5 μm .

2. The liquid crystal display panel as claimed in claim 1, wherein the first protrusion is provided for maintaining a first cell gap between the first and second substrates.

3. The liquid crystal display panel as claimed in claim 2, wherein the second protrusion is provided for maintaining a second cell gap which is smaller than the first cell gap between the first and second substrates when the liquid crystal display panel is subjected to an external force.

4. The liquid crystal display panel as claimed in claim 1, wherein the first distance is different from the second distance by about 0.2 μm to about 2.5 μm , and the first distance approximates zero.

20 5. The liquid crystal display panel as claimed in claim 1, wherein the first protrusion and the second protrusion have a pillar shape.

6. The liquid crystal display panel as claimed in claim 1, further comprising a plurality of third protrusions disposed on one of the first and the second substrates for regulating orientation of the liquid crystal layer.

25 7. A liquid crystal display panel comprising:

a first substrate;

a second substrate;

a liquid crystal layer sandwiched between the first substrate and the second substrate;

a plurality of first protrusions disposed on the first substrate and separated from the second substrate by a first distance; and

a plurality of second protrusions disposed on the first substrate and separated from the second substrate by a second distance different from the first distance,

5 wherein the first protrusion and the second protrusion are made of a first material.

8. The liquid crystal display panel as claimed in claim 7, further comprising a plurality of third protrusions disposed on one of the first and the second substrates and made of a second material different from the first material.

10 9. The liquid crystal display panel as claimed in claim 8, wherein the first and second protrusions are harder than the third protrusion.

10. The liquid crystal display panel as claimed in claim 8, wherein the third protrusions are provided for regulating orientation of the liquid crystal layer.

11. The liquid crystal display panel as claimed in claim 7, wherein the first protrusion is provided for maintaining a first cell gap between the first and second substrates.

15 12. The liquid crystal display panel as claimed in claim 11, wherein the second protrusion is provided for maintaining a second cell gap which is smaller than the first cell gap between the first and second substrates when the liquid crystal display panel is subjected to an external force.

20 13. The liquid crystal display panel as claimed in claim 7, wherein the first distance approximates zero.

14. The liquid crystal display panel as claimed in claim 7, wherein the first protrusion and the second protrusion have a pillar shape.

15. A liquid crystal display panel comprising:

 a first substrate;

25 a second substrate;

 a liquid crystal layer sandwiched between the first substrate and the second substrate;

 a plurality of first protrusions disposed on the first substrate and separated from the second substrate by a first distance;

a plurality of second protrusions disposed on the first substrate and separated from the second substrate by a second distance different from the first distance; and

a plurality of third protrusions disposed on one of the first and second substrates,

wherein, when the liquid crystal display panel is subjected to an external force, the first and the second protrusions contact the second substrate, but the third protrusions don't contact the other of the first and second substrates.

16. The liquid crystal display panel as claimed in claim 15, wherein the first protrusion is provided for maintaining a first cell gap between the first and second substrates.

17. The liquid crystal display panel as claimed in claim 16, wherein the second protrusion is provided for maintaining a second cell gap which is smaller than the first distance between the first and second substrates when the liquid crystal display panel is subjected to the external force.

18. The liquid crystal display panel as claimed in claim 15, wherein the first distance approximates zero.

19. The liquid crystal display panel as claimed in claim 15, wherein the first protrusion and the second protrusion have a pillar shape.

20. The liquid crystal display panel as claimed in claim 15, wherein the third protrusions are provided for regulating orientation of the liquid crystal layer.